

2604 NE Industrial Drive, Suite 230 North Kansas City, Missouri 64117 Telephone: 816.231.5580 Fax: 816.231.5641 www.occutec.com

October 18, 2019

Diane Czarnecki
Industrial Hygienist
Facilities Management Division
GSA Public Buildings Service - Heartland Region
2300 Main Street, Kansas City, MO 64108

RE: Goodfellow Federal Center – Bldg. # 104E Drinking Water Sampling Project # 919103

Dear Ms. Czarnecki:

Thank you for the opportunity to provide the General Services Administration (GSA) with the above referenced environmental sampling activities. The following is our report.

INTRODUCTION

As requested, OCCU-TEC, Inc. (OCCU-TEC) conducted drinking water sampling for the presence of polychlorinated biphenyls (PCBs) and polycyclic aromatic hydrocarbons (PAHs) at Building #104E of the Goodfellow Federal Center (GFC) located at 4300 Goodfellow Federal Boulevard in St. Louis, Missouri. Sampling was completed in response to the ongoing environmental condition assessment at the GFC which is documented at the GFC Reading Room located at:

https://www.gsa.gov/portal/content/212361.

Drinking water sampling was conducted to determine the current levels of PCBs and PAHs in representative sources throughout the complex. Drinking water sampling at Bldg. #104E was conducted on September 9, 2019 by Mr. Austin O'Byrne of OCCU-TEC.

METHODOLOGY

The samples were collected individually labeled dedicated laboratory provided one (1) liter (L) glass amber bottles and 44.7 milliliter (mL) volatile organic analysis (VOA) vials with Teflon septa lined screw caps. One (1) liter bottles were filled to the shoulder and capped. VOA vials were filled until a positive meniscus was achieved, and the cap was placed on the vial to prevent airspace. One (1) liter bottles and VOA vials were preserved with laboratory provided preservative and placed on ice for shipment. The samples were then

shipped overnight to Eurofins-Eaton Analytical in South Bend, Indiana for analysis. Eurofins-Eaton Analytical is certified by the State of Missouri Department of Natural Resources (MDNR) as an approved drinking water laboratory. Eurofins-Eaton Analytical's Missouri Certification number is 880.

Drinking water sampling for the presence of PCBs and PAHs was conducted at four (4) distinct locations within Building #104E. A total of five (5) samples were obtained including duplicate samples.

PCB samples were analyzed as per EPA Method 505 "Analysis of Organohalide Pesticides and Commercial Polychlorinated Biphenyl Products in water by Microextraction and Gas Chromatography." PAH samples were analyzed by EPA Method 525.2 "Determination of Organic Compounds in Drinking Water by Liquid-Solid Extraction and Capillary Column Gas Chromatography/Mass Spectrometry."

RESULTS AND DISCUSSION

A summary table of all sampling locations is included in Appendix A. The complete laboratory report for the drinking water sampling from Eurofins-Eaton Analytical is attached in Appendix B.

PCBs

All samples were below the maximum containment level (MCL) and the minimum reporting level (MRL) for the analytical method used.

PAHs

All samples were below the maximum containment level (MCL) and the minimum reporting level (MRL) for the analytical method used.

LIMITATIONS

The scope of this assessment was limited in nature. OCCU-TEC collected samples from a select number of drinking water sources in an effort to minimize cost while providing a general overview of the drinking water quality at the site. Sample locations do not encompass every drinking water source at the site. Samples were only analyzed for PCBs and PAHs in accordance with the scope of services requested by GSA. OCCU-TEC is not responsible for potential contaminants not identified in this report.

This report was prepared for the sole use of GSA. Reliance by any party other than GSA is expressly forbidden without OCCU-TEC's written permission. Any parties relying on

the report, with OCCU-TEC's written permission, are bound by the terms and conditions outlined in the original proposal as if said proposal was prepared for them.

OCCU-TEC appreciates the opportunity to work with the GSA on this project. Please contact us if you have any questions regarding this report or if we may be of any additional service.

Sincerely,



Jeff T. Smith Senior Project Manager (b) (6)

Kevin Heriford Environmental Operations Manager (QA/QC)

ATTACHMENTS

Appendix A, Sample Summary by Location Appendix B, Water Sample Laboratory Report



	Goodfellow Federal Center - Building 104E									
Sample Number	Location	Water Source	Analyte							
104E-W-01	1st Floor Column O48 - Breakroom	Sink	PCBs							
104E-VV-01	1St Floor Column 048 - Breakroom	SIIIK	PAHs							
104F-W-02	1st Floor Column O48 - Breakroom (Duplicate)	Sink	PCBs							
104E-W-02	15t Floor Column 046 - Breakfoom (Duplicate)	SIIIK	PAHs							
104E-W-03	1st Floor Column L45 - Left Side	Elkay Drinking	PCBs							
104E-W-03	1st Floor Column L45 - Left Side	Fountain	PAHs							
104E-W-04	2nd Floor Column O43 - Left Side	Elkay Drinking	PCBs							
1046-11-04	Zilu Floor Coluillii 045 - Left Side	Fountain	PAHs							
104E-W-05	2nd Floor Column O44 - Breakroom	Cink	PCBs							
104E-W-03	Ziiu Fiooi Coluiiiii 044 - Breakroom	Sink	PAHs							



LABORATORY REPORT

If you have any questions concerning this report, please do not hesitate to call us at $(800)\ 332-4345$ or $(574)\ 233-4777$.

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STATE CERTIFICATION LIST

State	Certification	State	Certification
Alabama	40700	Missouri	880
Alaska	IN00035	Montana	CERT0026
Arizona	AZ0432	Nebraska	NE-OS-05-04
Arkansas	IN00035	Nevada	IN00035
California	2920	New Hampshire*	2124
Colorado	IN00035	New Jersey*	IN598
Colorado Radiochemistry	IN00035	New Mexico	IN00035
Connecticut	PH-0132	New York*	11398
Delaware	IN035	North Carolina	18700
Florida*	E87775	North Dakota	R-035
Georgia	929	Ohio	87775
Hawaii	IN035	Oklahoma	D9508
Idaho	IN00035	Oregon (Primary AB)*	4074
Illinois*	200001	Pennsylvania*	68-00466
Illinois Microbiology	17767	Puerto Rico	IN00035
Illinois Radiochemistry	IN00035	Rhode Island	LAO00343
Indiana Chemistry	C-71-01	South Carolina	95005
Indiana Microbiology	M-76-07	South Dakota	IN00035
Iowa	098	Tennessee	TN02973
Kansas*	E-10233	Texas*	T104704187-18-12
Kentucky	90056	Texas/TCEQ	TX207
Louisiana*	LA014	Utah*	IN00035
Maine	IN00035	Vermont	VT-8775
Maryland	209	Virginia*	460275
Massachusetts	M-IN035	Washington	C837
Michigan	9926	West Virginia	9927 C
Minnesota*	018-999-338	Wisconsin	999766900
Mississippi	IN035	Wyoming	IN035
EPA	IN00035		

*NELAP/TNI Recognized Accreditation Bodies

Revision date: 03/14/2019



110 South Hill Street South Bend, IN 46617 Tel: (574) 233-4777 Fax: (574) 233-8207 1 800 332 4345

Laboratory Report

Client: OCCU-TEC Inc. Report: 464818

Attn: Jeff Smith Priority: Standard Written

2604 NE Industrial Drive Status: Final

Suite 230 PWS ID: Not Supplied

North Kansas City, MO 64117

	Sample Information									
EEA ID#	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time					
4415953	104E-W-01	505	09/09/19 13:55	Client	09/11/19 09:45					
4415958	104E-W-01	525.2	09/09/19 13:55	Client	09/11/19 09:45					

Report Summary

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Kelly Blackburn at (574) 233-4777.

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(b) (6)

ASM

09/30/2019

Date

Client Name: OCCU-TEC Inc.

Report #: 464818

Authorized Signature

Sampling Point: 104E-W-01 PWS ID: Not Supplied

	Semi-volatile Organic Chemicals									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed	EEA ID#	
12674-11-2	Aroclor 1016	505		0.08	< 0.08	ug/L	09/12/19 15:30	09/13/19 02:15	4415953	
11104-28-2	Aroclor 1221	505		0.19	< 0.19	ug/L	09/12/19 15:30	09/13/19 02:15	4415953	
11141-16-5	Aroclor 1232	505		0.23	< 0.23	ug/L	09/12/19 15:30	09/13/19 02:15	4415953	
53469-21-9	Aroclor 1242	505		0.26	< 0.26	ug/L	09/12/19 15:30	09/13/19 02:15	4415953	
12672-29-6	Aroclor 1248	505		0.1	< 0.1	ug/L	09/12/19 15:30	09/13/19 02:15	4415953	
11097-69-1	Aroclor 1254	505		0.1	< 0.1	ug/L	09/12/19 15:30	09/13/19 02:15	4415953	
11096-82-5	Aroclor 1260	505		0.2	< 0.2	ug/L	09/12/19 15:30	09/13/19 02:15	4415953	
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	09/12/19 15:30	09/13/19 02:15	4415953	
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	09/12/19 15:30	09/13/19 02:15	4415953	
83-32-9	Acenaphthene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
208-96-8	Acenaphthylene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
120-12-7	Anthracene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
56-55-3	Benzo(a)anthracene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
205-99-2	Benzo(b)fluoranthene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
207-08-9	Benzo(k)fluoranthene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
191-24-2	Benzo(g,h,i)perylene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
218-01-9	Chrysene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
53-70-3	Dibenzo(a,h)anthracene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
206-44-0	Fluoranthene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
86-73-7	Fluorene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
193-39-5	Indeno(1,2,3-cd)pyrene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
90-12-0	1-Methylnaphthalene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
91-57-6	2-Methylnaphthalene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
91-20-3	Naphthalene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
85-01-8	Phenanthrene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	
129-00-0	Pyrene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/24/19 07:08	4415958	

Any positive Aroclor result would require analysis for total PCB as decachlorobiphenyl by method 508A (MCL = 0.5 ug/L)

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	۸	!

^{\$} The state of origin does not offer certification for this parameter.

Lab Definitions

Continuing Calibration Check Standard (CCC) / Continuing Calibration Verification (CCV) / Initial Calibration Verification Standard (ICV) / Initial Performance Check (IPC) - is a standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. This standard is used to verify the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of continuing standards may be varied, when prescribed by the reference method, so that the range of the calibration curve is verified on a regular basis. CCL, CCM, and CCH are the CCC standards at low, mid, and high concentration levels, respectively.

Internal Standards (IS) - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

Laboratory Duplicate (LD) - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS) - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control. FBL, FBM, and FBH are the LFB samples at low, mid, and high concentration levels, respectively.

Laboratory Method Blank (LMB) / **Laboratory Reagent Blank (LRB)** - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

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Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Sample Matrix Duplicate (LFSMD) - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix. SDL, SDM, and SDH / LFSMDL, LFSMDM, and LFSMDH are the MSD or LFSMD at low, mid, and high concentration levels, respectively.

Matrix Spike Sample (MS) / Laboratory Fortified Sample Matrix (LFSM) - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results. MSL, MSM, and MSH / LFSML, LFSMM, and LFSMH are the MS or LFSM at low, mid, and high concentration levels, respectively.

Quality Control Standard (QCS) / Second Source Calibration Verification (SSCV) - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS) - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).



110 South Hill Street South Bend, IN 46617 Tel: (574) 233-4777 Fax: (574) 233-8207 1 800 332 4345

Laboratory Report

Client: OCCU-TEC Inc. Report: 464818

Attn: Jeff Smith Priority: Standard Written

2604 NE Industrial Drive Status: Final

Suite 230 PWS ID: Not Supplied

North Kansas City, MO 64117

	Sample Information									
EEA ID#	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time					
4415954	104E-W-02	505	09/09/19 14:00	Client	09/11/19 09:45					
4415959	104E-W-02	525.2	09/09/19 14:00	Client	09/11/19 09:45					

Report Summary

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Kelly Blackburn at (574) 233-4777.

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(b) (6)

ASM

09/30/2019

Date

Client Name: OCCU-TEC Inc.

Report #: 464818

Authorized Signature

Sampling Point: 104E-W-02 PWS ID: Not Supplied

	Semi-volatile Organic Chemicals									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed	EEA ID#	
12674-11-2	Aroclor 1016	505		0.08	< 0.08	ug/L	09/12/19 15:30	09/13/19 03:03	4415954	
11104-28-2	Aroclor 1221	505		0.19	< 0.19	ug/L	09/12/19 15:30	09/13/19 03:03	4415954	
11141-16-5	Aroclor 1232	505		0.23	< 0.23	ug/L	09/12/19 15:30	09/13/19 03:03	4415954	
53469-21-9	Aroclor 1242	505		0.26	< 0.26	ug/L	09/12/19 15:30	09/13/19 03:03	4415954	
12672-29-6	Aroclor 1248	505		0.1	< 0.1	ug/L	09/12/19 15:30	09/13/19 03:03	4415954	
11097-69-1	Aroclor 1254	505		0.1	< 0.1	ug/L	09/12/19 15:30	09/13/19 03:03	4415954	
11096-82-5	Aroclor 1260	505		0.2	< 0.2	ug/L	09/12/19 15:30	09/13/19 03:03	4415954	
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	09/12/19 15:30	09/13/19 03:03	4415954	
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Any positive Aroclor result would require analysis for total PCB as decachlorobiphenyl by method 508A (MCL = 0.5 ug/L)

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	۸	!

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1 800 332 4345

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Client: OCCU-TEC Inc. Report: 464818

Attn: Jeff Smith Priority: Standard Written

2604 NE Industrial Drive Status: Final

Suite 230 PWS ID: Not Supplied

North Kansas City, MO 64117

	Sample Information									
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4415955	104E-W-03	505	09/09/19 14:06	Client	09/11/19 09:45					
4415960	104E-W-03	525.2	09/09/19 14:06	Client	09/11/19 09:45					

Report Summary

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(b) (6)

ASM

09/30/2019

Date

Authorized Signature
Client Name: OCCU-TEC Inc.

Report #: 464818

Sampling Point: 104E-W-03 PWS ID: Not Supplied

	Semi-volatile Organic Chemicals										
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed	EEA ID#		
12674-11-2	Aroclor 1016	505		0.08	< 0.08	ug/L	09/12/19 15:30	09/13/19 03:51	4415955		
11104-28-2	Aroclor 1221	505		0.19	< 0.19	ug/L	09/12/19 15:30	09/13/19 03:51	4415955		
11141-16-5	Aroclor 1232	505		0.23	< 0.23	ug/L	09/12/19 15:30	09/13/19 03:51	4415955		
53469-21-9	Aroclor 1242	505		0.26	< 0.26	ug/L	09/12/19 15:30	09/13/19 03:51	4415955		
12672-29-6	Aroclor 1248	505		0.1	< 0.1	ug/L	09/12/19 15:30	09/13/19 03:51	4415955		
11097-69-1	Aroclor 1254	505		0.1	< 0.1	ug/L	09/12/19 15:30	09/13/19 03:51	4415955		
11096-82-5	Aroclor 1260	505		0.2	< 0.2	ug/L	09/12/19 15:30	09/13/19 03:51	4415955		
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	09/12/19 15:30	09/13/19 03:51	4415955		
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	09/12/19 15:30	09/13/19 03:51	4415955		
83-32-9	Acenaphthene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 14:33	4415960		
208-96-8	Acenaphthylene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 14:33	4415960		
120-12-7	Anthracene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 14:33	4415960		
56-55-3	Benzo(a)anthracene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 14:33	4415960		
205-99-2	Benzo(b)fluoranthene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 14:33	4415960		
207-08-9	Benzo(k)fluoranthene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 14:33	4415960		
191-24-2	Benzo(g,h,i)perylene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/20/19 21:15	4415960		
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	09/12/19 08:00	09/19/19 14:33	4415960		
218-01-9	Chrysene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 14:33	4415960		
53-70-3	Dibenzo(a,h)anthracene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/20/19 21:15	4415960		
206-44-0	Fluoranthene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 14:33	4415960		
86-73-7	Fluorene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 14:33	4415960		
193-39-5	Indeno(1,2,3-cd)pyrene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 14:33	4415960		
90-12-0	1-Methylnaphthalene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 14:33	4415960		
91-57-6	2-Methylnaphthalene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 14:33	4415960		
91-20-3	Naphthalene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 14:33	4415960		
85-01-8	Phenanthrene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 14:33	4415960		
129-00-0	Pyrene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 14:33	4415960		

Any positive Aroclor result would require analysis for total PCB as decachlorobiphenyl by method 508A (MCL = 0.5 ug/L)

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	۸	!

^{\$} The state of origin does not offer certification for this parameter.

Lab Definitions

Continuing Calibration Check Standard (CCC) / Continuing Calibration Verification (CCV) / Initial Calibration Verification Standard (ICV) / Initial Performance Check (IPC) - is a standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. This standard is used to verify the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of continuing standards may be varied, when prescribed by the reference method, so that the range of the calibration curve is verified on a regular basis. CCL, CCM, and CCH are the CCC standards at low, mid, and high concentration levels, respectively.

Internal Standards (IS) - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

Laboratory Duplicate (LD) - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS) - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control. FBL, FBM, and FBH are the LFB samples at low, mid, and high concentration levels, respectively.

Laboratory Method Blank (LMB) / **Laboratory Reagent Blank (LRB)** - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

Laboratory Trip Blank (LTB) / **Field Reagent Blank (FRB)** - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The FRB/LTB container follows the collection bottles to and from the collection site, but the FRB/LTB is not opened at any time during the trip. The FRB/LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Sample Matrix Duplicate (LFSMD) - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix. SDL, SDM, and SDH / LFSMDL, LFSMDM, and LFSMDH are the MSD or LFSMD at low, mid, and high concentration levels, respectively.

Matrix Spike Sample (MS) / Laboratory Fortified Sample Matrix (LFSM) - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results. MSL, MSM, and MSH / LFSML, LFSMM, and LFSMH are the MS or LFSM at low, mid, and high concentration levels, respectively.

Quality Control Standard (QCS) / **Second Source Calibration Verification (SSCV)** - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS) - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).



110 South Hill Street South Bend, IN 46617 Tel: (574) 233-4777 Fax: (574) 233-8207 1 800 332 4345

Laboratory Report

Client: OCCU-TEC Inc. Report: 464818

Attn: Jeff Smith Priority: Standard Written

2604 NE Industrial Drive Status: Final

Suite 230 PWS ID: Not Supplied

North Kansas City, MO 64117

	Sample Information										
EEA ID#	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time						
4415956	104E-W-04	505	09/09/19 14:23	Client	09/11/19 09:45						
4415961	104E-W-04	525.2	09/09/19 14:23	Client	09/11/19 09:45						

Report Summary

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Kelly Blackburn at (574) 233-4777.

Note: This report may not be reproduced, except in full, without written approval from EEA.

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ASM

09/30/2019

Date

Client Name: OCCU-TEC Inc.

Report #: 464818

Authorized Signature

Sampling Point: 104E-W-04 PWS ID: Not Supplied

	Se	mi-volati	le Orga	nic Chei	nicals				
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed	EEA ID#
12674-11-2	Aroclor 1016	505		0.08	< 0.08	ug/L	09/12/19 15:30	09/13/19 04:16	4415956
11104-28-2	Aroclor 1221	505		0.19	< 0.19	ug/L	09/12/19 15:30	09/13/19 04:16	4415956
11141-16-5	Aroclor 1232	505		0.23	< 0.23	ug/L	09/12/19 15:30	09/13/19 04:16	4415956
53469-21-9	Aroclor 1242	505		0.26	< 0.26	ug/L	09/12/19 15:30	09/13/19 04:16	4415956
12672-29-6	Aroclor 1248	505		0.1	< 0.1	ug/L	09/12/19 15:30	09/13/19 04:16	4415956
11097-69-1	Aroclor 1254	505		0.1	< 0.1	ug/L	09/12/19 15:30	09/13/19 04:16	4415956
11096-82-5	Aroclor 1260	505		0.2	< 0.2	ug/L	09/12/19 15:30	09/13/19 04:16	4415956
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	09/12/19 15:30	09/13/19 04:16	4415956
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	09/12/19 15:30	09/13/19 04:16	4415956
83-32-9	Acenaphthene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:13	4415961
208-96-8	Acenaphthylene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:13	4415961
120-12-7	Anthracene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:13	4415961
56-55-3	Benzo(a)anthracene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:13	4415961
205-99-2	Benzo(b)fluoranthene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:13	4415961
207-08-9	Benzo(k)fluoranthene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:13	4415961
191-24-2	Benzo(g,h,i)perylene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/20/19 21:55	4415961
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	09/12/19 08:00	09/19/19 15:13	4415961
218-01-9	Chrysene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:13	4415961
53-70-3	Dibenzo(a,h)anthracene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/20/19 21:55	4415961
206-44-0	Fluoranthene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:13	4415961
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90-12-0	1-Methylnaphthalene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:13	4415961
91-57-6	2-Methylnaphthalene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:13	4415961
91-20-3	Naphthalene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:13	4415961
85-01-8	Phenanthrene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:13	4415961
129-00-0	Pyrene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:13	4415961

Any positive Aroclor result would require analysis for total PCB as decachlorobiphenyl by method 508A (MCL = 0.5 ug/L)

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	۸	!

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Lab Definitions

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110 South Hill Street South Bend, IN 46617 Tel: (574) 233-4777 Fax: (574) 233-8207 1 800 332 4345

Laboratory Report

Client: OCCU-TEC Inc. Report: 464818

Attn: Jeff Smith Priority: Standard Written

2604 NE Industrial Drive Status: Final

Suite 230 PWS ID: Not Supplied North Kansas City, MO 64117

	Sampl	e Information			
EEA ID#	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
4415957	104E-W-05	505	09/09/19 14:31	Client	09/11/19 09:45
4415962	104E-W-05	525.2	09/09/19 14:31	Client	09/11/19 09:45

Report Summary

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Kelly Blackburn at (574) 233-4777.

Note: This report may not be reproduced, except in full, without written approval from EEA.

(b) (6)

ASM

09/30/2019

Date

Client Name: OCCU-TEC Inc.

Report #: 464818

Authorized Signature

Sampling Point: 104E-W-05 PWS ID: Not Supplied

	Sei	mi-volati	ile Orga	nic Chei	micals				
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed	EEA ID#
12674-11-2	Aroclor 1016	505		0.08	< 0.08	ug/L	09/12/19 15:30	09/13/19 04:40	4415957
11104-28-2	Aroclor 1221	505		0.19	< 0.19	ug/L	09/12/19 15:30	09/13/19 04:40	4415957
11141-16-5	Aroclor 1232	505		0.23	< 0.23	ug/L	09/12/19 15:30	09/13/19 04:40	4415957
53469-21-9	Aroclor 1242	505		0.26	< 0.26	ug/L	09/12/19 15:30	09/13/19 04:40	4415957
12672-29-6	Aroclor 1248	505		0.1	< 0.1	ug/L	09/12/19 15:30	09/13/19 04:40	4415957
11097-69-1	Aroclor 1254	505		0.1	< 0.1	ug/L	09/12/19 15:30	09/13/19 04:40	4415957
11096-82-5	Aroclor 1260	505		0.2	< 0.2	ug/L	09/12/19 15:30	09/13/19 04:40	4415957
57-74-9	Chlordane	505	2 *	0.1	< 0.1	ug/L	09/12/19 15:30	09/13/19 04:40	4415957
8001-35-2	Toxaphene	505	3 *	1.0	< 1.0	ug/L	09/12/19 15:30	09/13/19 04:40	4415957
83-32-9	Acenaphthene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:54	4415962
208-96-8	Acenaphthylene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:54	4415962
120-12-7	Anthracene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:54	4415962
56-55-3	Benzo(a)anthracene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:54	4415962
205-99-2	Benzo(b)fluoranthene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:54	4415962
207-08-9	Benzo(k)fluoranthene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:54	4415962
191-24-2	Benzo(g,h,i)perylene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/20/19 22:36	4415962
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	09/12/19 08:00	09/19/19 15:54	4415962
218-01-9	Chrysene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:54	4415962
53-70-3	Dibenzo(a,h)anthracene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/20/19 22:36	4415962
206-44-0	Fluoranthene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:54	4415962
86-73-7	Fluorene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:54	4415962
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91-20-3	Naphthalene \$	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:54	4415962
85-01-8	Phenanthrene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:54	4415962
129-00-0	Pyrene	525.2		0.1	< 0.1	ug/L	09/12/19 08:00	09/19/19 15:54	4415962

Any positive Aroclor result would require analysis for total PCB as decachlorobiphenyl by method 508A (MCL = 0.5 ug/L)

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	۸	!

^{\$} The state of origin does not offer certification for this parameter.

Lab Definitions

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Laboratory Method Blank (LMB) / **Laboratory Reagent Blank (LRB)** - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

Laboratory Trip Blank (LTB) / **Field Reagent Blank (FRB)** - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The FRB/LTB container follows the collection bottles to and from the collection site, but the FRB/LTB is not opened at any time during the trip. The FRB/LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Sample Matrix Duplicate (LFSMD) - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix. SDL, SDM, and SDH / LFSMDL, LFSMDM, and LFSMDH are the MSD or LFSMD at low, mid, and high concentration levels, respectively.

Matrix Spike Sample (MS) / Laboratory Fortified Sample Matrix (LFSM) - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results. MSL, MSM, and MSH / LFSML, LFSMM, and LFSMH are the MS or LFSM at low, mid, and high concentration levels, respectively.

Quality Control Standard (QCS) / Second Source Calibration Verification (SSCV) - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS) - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).



110 S. Hill Street South Bend, IN 46617 T: 1 800 332 4345

Batch # 764818	Page of	PROJECT NAME PO#	=		CODE	ХІЯТ	YES NO 0	7	959 X 1 7 50	960 X 4 905W	que x y m su	que X i pulsul	•							
T: 1.800.332.4345 F: 1.574.233.8207	CHAIN OF CUSTODY RECORD	PWS ID# STATE (sample origin) PROJE	, MO	POPULATION SERVED SOURCE WATER	NA	TEST NAME		EDS - PAHS and PCBS 4411				7								
Eaton Analytical	CHAIN OF	SAMPLER (Signature)	(b) (6)	COMPLIANCE	MONITORING	SAMPLING SITE		104E-12-01	で46-10-01	10/15-W-03	104E-W-07	104E-W-05								
Eator	www.EurofinsUS.com/Eaton Sharlard area for FFA use only	REPORT TO: Keyin Heritord	OCCU-TEC, Kheriford@cccutec.com	BILL TO: OVI 11-7 E.I	0150010	LAB Number COLLECTION	536.500 DATE TIME AM PM	1 4416 953 9/9/19 13:55 X	2 1 954 9/19/19/14:00 X	5 9/9/19 1	4/4/19	6 J 957 9/9/19 14:31 X	9	7	8	6	10	 12	13	14

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	RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED	TIME RECEIVED BY:(Signature)		DATE	TIME	LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT	UNUSED PORTIONS OF NON-	AQUEOUS SAMPLE	ES TO CLIENT	
	(b) (6)	9/10/10	16:0					LAB CC	LAB COMMENTS				
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					(CONDIT	TIONS UPON RECEIPT (check one):	1:0			
					b) 6)	C	51 1	2750	Iced Wet/Blue Ambient	S. Linon Beceint	Receint	NA	
			AM PM			5	11	AM PM	1		- discount	Ca.	
	MATRIX CODES:	TURN-ARC	UND TIME	E (TAT) - SL	TURN-AROUND TIME (TAT) - SURCHARGES								
	DW-DRINKING WATER	SW = Standard	1 Written: (15	SW = Standard Written: (15 working days)	%0	_	V* = Immediate	IV* = Immediate Verbal: (3 working days)	s) 100%				
F	RW-REAGENT WATER GW-GROUND WATER	RV* = Rush Verbal: (5 working days)	rbal: (5 workin	g days)	20%		W* =Immediate	IW* =Immediate Written: (3 working days)	ys) 125%	Samples received unannounced with less	nnounced with le	SS	
Pag	EW-EXPOSURE WATER	RW* = Rush Written: (5 working days)	ritten: (5 work	ing days)	75%	-	SP* = Weekend, Holiday	Holiday	CALL	than 48 hours holding time remaining may	time remaining m	nay	
je							STAT* = Less than 48 hours	an 48 hours	CALL	be subject to additional charges.	ii charges.		
18	WW-WASTE WATER	* Please cal	l, expedite	d service no	* Please call, expedited service not available for all testing								

Ub-LO-1-0435 Issue 7.0 Effective Date: 2018-10-11 Sample analysis will be provided according to the standard EEA/Water Services Terms, which are available upon request. Any other terms proposed by Customer are deemed material attentions and are rejected unless expressly agreed to in writing by EEA. 06-LO-F0435 Issue 7.0 Effective Date: 2018-10-11 * Please call, expedited service not available for all testing